

Application No.: 10/743,387

Docket No.: 21581-00314-US

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application.

Please cancel claims 2, 6, 7, 9, 12, 13, 14 and 16 without prejudice or disclaimer.

Listing of Claims:

1. (currently amended) A pretreatment method for coating comprising treating a substance to be treated by a chemical conversion coating agent to form a chemical conversion coat,

wherein the chemical conversion coating agent comprises: at least one kind member selected from the group consisting of zirconium, titanium and hafnium having a content of 50 ppm to 2000ppm; fluorine; and at least one kind member selected from the group consisting of amino group-containing silane coupling agents, hydrolysates thereof and polymers thereof having a content of 50 to 500 ppm as a concentration of solid matter,
said substance comprising a plurality of metal materials among the iron material, the aluminum material and the zinc material.

2. (canceled)

3. (currently amended) The pretreatment method for coating according to Claim 1, wherein the chemical conversion coating agent contains 1 to 5,000 ppm of at least one kind member of a chemical conversion reaction accelerator selected from the group consisting of nitrite ion, nitro group-containing compounds, hydroxylamine sulfate, persulfate ion, sulfite ion, hyposulfite ion, peroxides, iron (III) ion, citric acid iron compounds, bromate ion, perchlorinate ion, chlorate ion, chlorite ion, as well as ascorbic acid, citric acid, tartaric acid, malonic acid, succinic acid and salts thereof.

4. (currently amended) The pretreatment method for coating according to Claim 1, wherein the chemical conversion coating agent contains 20 to 10,000 ppm of at least one kind selected from the group consisting of zirconium, titanium and hafnium in terms of metal, and has a pH of 1.5 to 6.5.

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5. (currently amended) The pretreatment method for coating according to Claim 1, wherein the chemical conversion coating agent contains at least one kind member of adhesion and corrosion resistance imparting agent selected from the group consisting of magnesium ion, zinc ion, calcium ion, aluminum ion, gallium ion, indium ion and copper ion.
6. (canceled)
7. (canceled)
8. (currently amended) The pretreatment method for coating according to Claim 3, wherein the chemical conversion coating agent contains 20 to 10,000 ppm of at least one kind selected from the group consisting of zirconium, titanium and hafnium in terms of metal, and has a pH of 1.5 to 6.5.
9. (canceled)
10. (currently amended) The pretreatment method for coating according to Claim 3, wherein the chemical conversion coating agent contains at least one kind member of adhesion and corrosion resistance imparting agent selected from the group consisting of magnesium ion, zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.
11. (currently amended) The pretreatment method for coating according to Claim 4, wherein the chemical conversion coating agent contains at least one kind member of adhesion and corrosion resistance imparting agent selected from the group consisting of magnesium ion, zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.
12. (canceled)
13. (canceled)
14. (canceled)

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15. (currently amended) The pretreatment method for coating according to Claim 8, wherein the chemical conversion coating agent contains at least one kind member of adhesion and corrosion resistance imparting agent selected from the group consisting of magnesium ion, zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.

16. (canceled)

17. (new) A pretreatment method for coating comprising treating a substance to be treated by a chemical conversion coating agent to form a chemical conversion coat, wherein the chemical conversion coating agent comprises: at least one member selected from the group consisting of zirconium, titanium and hafnium having a content of 50 ppm to 2000ppm; fluorine; and at least one kind selected from the group consisting of amino group-containing silane coupling agents, hydrolysates thereof and polymers thereof having a content of 50 to 500 ppm as a concentration of solid matter, said substance consisting of an iron material.

18. (new) The pretreatment method for coating according to Claim 17, wherein the chemical conversion coating agent contains 1 to 5,000 ppm of at least one member of a chemical conversion reaction accelerator selected from the group consisting of nitrite ion, nitro group-containing compounds, hydroxylamine sulfate, persulfate ion, sulfite ion, hyposulfite ion, peroxides, iron (III) ion, citric acid iron compounds, bromate ion, perchlorinate ion, chlorate ion, chlorite ion, ascorbic acid, citric acid, tartaric acid, malonic acid, succinic acid and salts thereof.

19. (new) The pretreatment method for coating according to Claim 17, wherein the chemical conversion coating agent has a pH of 1.5 to 6.5.

20. (new) The pretreatment method for coating according to Claim 17, wherein the chemical conversion coating agent contains at least one member of adhesion and corrosion resistance imparting agent selected from the group consisting of magnesium ion, zinc ion, calcium ion, aluminum ion, gallium ion, indium ion and copper ion.

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21. (new) The pretreatment method for coating according to Claim 18,
wherein the chemical conversion coating agent has a pH of 1.5 to 6.5.
22. (new) The pretreatment method for coating according to Claim 18,
wherein the chemical conversion coating agent contains at least one member of adhesion
and corrosion resistance imparting agent selected from the group consisting of magnesium ion,
zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.
23. (new) The pretreatment method for coating according to Claim 19,
wherein the chemical conversion coating agent contains at least one member of adhesion
and corrosion resistance imparting agent selected from the group consisting of magnesium ion,
zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.
24. (new) The pretreatment method for coating according to Claim 21,
wherein the chemical conversion coating agent contains at least one member of adhesion
and corrosion resistance imparting agent selected from the group consisting of magnesium ion,
zinc ion, calcium ion, aluminum ion, gallium ion, indium ion, and copper ion.